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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,075	02/25/2004	Nobuyuki Nishiwaki	118852	8934

25944 7590 04/11/2007
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EXAMINER

BANKHEAD, GENE LOUIS

ART UNIT	PAPER NUMBER
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3744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/785,075

Applicant(s)

NISHIWAKI, NOBUYUKI

Examiner

Gene L. Bankhead

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-11 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3,12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1,5,7,9-11,15,17,19 and 20 is/are rejected.
- 7) ☒ Claim(s) 4-6,8,14-16 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/25/2006, with respect to the rejection(s) of 5claim(s) 1, 4-11, and 14-20 under 35 U.S.C 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, up on further consideration, a new ground(s) of rejection is made in view of Oka et al. (US 6279390) and Naitoh (US 5018484).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,7,9-11,17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka et al. (US 6279390) in view of Naitoh (US 5018484).

Regarding claims 1, 10, 11, and 20 Oka et al. teach a thermostat malfunction detecting system for an engine cooling system capable of detecting an open-malfunction of a thermostat 13 in a circulating path 14 for cooling water within an engine 11 based upon both a detected cooling water temperature and a cooling water temperature normally expected when the thermostat of the engine is closed (Abstract lines 1-8). They further teach a radiator fan 18 that is blown to enhance the heat radiating effect of the radiator (column 5 lines 29-40). They fail however to explicitly

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teach the electric motor fan is blown with respect to the circulating path when the detected cooling water temperature is within a predetermined range. Naitoh teach an apparatus for controlling an electric cooling fan of an automotive vehicle facing a radiator of the vehicle, and further teach the cooling fan comprises a first judgment signal that activates the cooling fan when the coolant temperature becomes lower than a preset temperature (Abstract and column 4 lines 13-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Naitoh with Oka et al. to advantageously cool the coolant with the radiator fan and bring the coolant temperature to a degree range where the thermostat can operate normally when the temperature of coolant is higher from a preset temperature of coolant expected in view of the teachings of Naitoh (column 1 lines 10-46 and column 2 lines 15-40).

Regarding claim 7, Oka et al. teach the thermostat determines whether or not the thermostat is experiencing a malfunction after the radiator fan has been driven intermittently (column 14 lines 52-65).

With regard to claim 9, Oka et al. teach the radiation of the coolant is directly related to the fan blower speed when the thermostat is in a valve closed malfunction state (column 14 lines 30-42). It would have been obvious to one of ordinary skill in the art the time of the invention to adjust the rotation speed of the electric motor fan when the thermostat is in a valve closed malfunction state to cool the temperature of coolant in the radiating section to a degree range for the valve to operate normally.

In regard to the rejection of claims 17 and 19, see the rejection of claims 7, 9 and 11 as claims cite similar subject matter.

Allowable Subject Matter

Claims 2, 3, 12 and 13 allowed.

Claims 4-6, 8, 14-16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

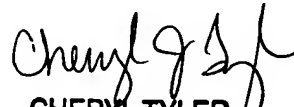
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gene L. Bankhead whose telephone number is (571)-272-8963. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571)-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


CHERYL TYLER
SUPERVISORY PATENT EXAMINER

Examiner
Art Unit 3744
GB